

Original Claim1	Amended Claim 1
1. A thermal membrane, comprising of	1. A composite thermal transfer membrane, comprising:
a thin polymer membrane that insulate a heat transfer material therewith [having] a plurality of through holes in a predetermined pattern, and	a flexible polymer membrane that is capable of having a thickness equal to or less than 100 $\mu\text{m}$ having predetermined heat transfer and electrical insulating properties, with the polymer membrane having a plurality of through-openings disposed therein and the through-openings having predetermined shapes, and with the polymer membrane being capable of being disposed between a heat receiving device and a heat generating device that have non-planar surface areas and conforming to the non-planar surface shapes;
thermal condition and insulating material filling a predetermined pattern of at least a hole to provide increased thermal conductivity to the thermal membrane.	thermal transfer material having thermal condition and insulating properties, with the thermal transfer material being disposed in the through-openings of the polymer membrane and being flexible with the polymer membrane, the thermal transfer material having he transfer properties such that heat thermal transfer material will transfer heat per surface unit area at a rate greater than the polymer membrane.

The preamble of each of the claims is directed to a thermal membrane. The difference between the two preambles is that the preamble for amended claim 1 more particularly claims the thermal membrane as the “composite material” based on the constituent parts that are recited in the remainder of the claim. This is consistent with the original claim 1 that claims the same composite structure that includes the elements: the thin polymer material and the thermal transfer material that fills the holes in the polymer material. Thus, a person of ordinary skill the art would clearly understand that the preamble of amended claim 1 would be directed to the same invention as original claim 1.

The first element of original claim 1 is directed to a thin polymer material that has a pattern of holes through it. Amended claim 1 is also directed to a thin polymer material

with holes through it, but adds additional features consistent with the specification. These added features were to overcome the rejection advanced by the Examiner based on U.S. Patent No. 4,204,015 to Wardlaw et al. ("Wardlaw"). Support for these additional features is found at: Specification, page 4, line 28 to page 5, line 2; and page 6, lines 1-7.

The second element of original claim 1 is directed to the material that fills the holes in the thin polymer material. The material that fills the holes is a thermal transfer material that increases the thermal conductivity of the composite structure defined by original claim 1.

The second element of amended claim 1 is also directed to the thermal material that fills the holes in the polymer material but the thermal material has added features to further distinguish amended claim 1 from Wardlaw. The features that were added to the second element of amended claim 1 are consistent with the specification. Support for the features addressed to the second element of amended claim 1 is found at: Specification, page 4, lines 5-27; and page 6, lines 1-7. As such, original claim 1 and amended claim 1 define a composite material that includes as elements the thin polymer membrane and the thermal transfer material that fills the holes in the membrane.

The amendments to original claim 1 were the result of Applicants responding to the Examiner's anticipation rejection under 35 U.S.C. §102 based on Wardlaw. In rejecting original claim 1 based on Wardlaw, the Examiner stated (January 19, 2005 Office Action, p. 3):

Regarding Applicant's claim 1, Wardlaw discloses a thermal membrane comprising a thin polymer membrane (*intermediate layer, col. 2, lines 25-29*) that insulate a heat transfer material (*window pane structure, col. 1, lines 5-9*) therewith a plurality of through holes (*perforations, col. 2, line 41*) in a predetermined pattern (figure 1) and a thermal condition and insulating material (*gas, col. 2, line 6*) fill a predetermined pattern of at least a hole to provide increased thermal conductivity to the thermal membrane (*col. 2, lines 3-8*). [Emphasis in original.]

Applicants submit that the Examiner's recognition of the features of the present invention as expressed in original claim 1 in light of the teachings Wardlaw would be the same type of recognition for the purpose of a prior art search for amended claim 1. This is

true because the invention of original claim 1 is a same as the invention of amended claim1.

When an Applicant is faced with an anticipation rejection, it is typical for such Applicant to add features from the specification to the rejected claim to distinguish the claimed invention from cited prior art. This is exactly what Applicants did in the present application. Applicants submit that they did not add any new elements to the claim 1 in amending it that would give credence to the Examiner's contention regarding the distinctiveness of the claims requiring a new application to be filed to continue prosecuting amended claims 1-10 in the present application. It appears that the Examiner is penalizing Applicants for amending the claims in light of her rejection as Applicants typically would do in the case of such a rejection. Accordingly, Applicants have presented a first ground for traversing the Examiner's contention a restriction of the claims is necessary

Applicants note the Examiner's position in numbered paragraph 3 of the Office Action regarding obvious variants. The Examiner seems to place significant weight in this paragraph to her continuation that what was claimed in original claim 1 is a different intermediate product than what is claimed in amended claim 1. The Examiner stated the following in this regard (January 19, 2006 Office Action, p. 2):

Distinctness is proven for claims in their relationship if the intermediate product species will make other than the final product (MPEP § 806.04 (b), 3<sup>rd</sup> paragraph), and the species are patentably distinct (MPEP § 806.04 (h)). In the instant case, the intermediate product is deemed to be useful as a diaper top sheet and this invention is patentably distinct since there's nothing on the record to show them to be obvious variants.

As the Examiner states in the quotation above, the obvious variant to support her contention is that the invention of original claim 1 is distinctive because what is claimed could be used as a "diaper top sheet." This, however, is not understood by Applicants.

Applicants submit that a "diaper top sheet" is not a viable variant as the Examiner suggests given the language of original claim 1. Applicants' position is that the first element is directed to a thin polymer membrane with thermal properties that has a pattern of holes through it. The second element is thermal condition and insulating material that fills of the holes in the thin polymer membrane. This combination is not directed in any

way to what a person of ordinary skill in the art would understand would be applicable to a diaper top sheet. Furthermore, the Examiner has not provided any support or evidence that a diaper top sheet would be an obvious variant of either original claim 1 or amend claim 1. Therefore, there is nothing to support the Examiner's position that a diaper top sheet would be obvious variant of either original claim 1 or amended claim 1. This is a second ground that demonstrates original claim 1 and amended claim 1 are not distinct inventions.

Noting the foregoing, Applicants have traversed Examiner's restriction requirement and request that it be withdrawn. Applicants also respectfully request that the Examiner review amended claims 1-10 for patentability.

The present invention is new, nonobvious, and useful. Consideration and allowance of pending claims 1-10 are respectfully requested.

Dated: 1-30-2008

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Wayne M. Kennard', with a large circular flourish at the end.

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Attorney Docket Number: 111254.129US2